

2/7/2005

13 and phenylglycidate

172 PHENYLGLYCIDATE

34 PHENYLGLYCIDATES

186 PHENYLGLYCIDATE

(PHENYLGLYCIDATE OR PHENYLGLYCIDATES)

L4 2 L3 AND PHENYLGLYCIDATE

=> d 14 ibib abs hitstr

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:815440 CAPLUS

DOCUMENT NUMBER: 142:23146

TITLE: Chemoenzymatic approach to optically active
phenylglycidates: resolution of bromo- and
iodohydrins

AUTHOR(S): Anand, Naveen; Kapoor, Munish; Koul, Surrinder;
Taneja, Subhash C.; Sharma, Rattan L.; Qazi, Ghulam N.

CORPORATE SOURCE: Biotechnology Division, Regional Research Laboratory,
Jammu Tawi, 180 001, India

SOURCE: Tetrahedron: Asymmetry (2004), 15(19), 3131-3138
CODEN: TASYE3; ISSN: 0957-4166

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Enantiomerically enriched **phenylglycidates**, precursors of the
taxol C-13 phenylisoserine side chain and diltiazem, were prepared by
kinetic resolution of anti-2-bromo-3-hydroxy- and anti-3-hydroxy-2-
iodophenylpropanoates to provide enantioenriched (2R,3R)- and
(2S,3S)-halohydrins. The bulkiness and inflexibility of bromo and iodo
groups in halohydrins have made them inaccessible to the active site of
most of the lipases utilized for the hydrolysis of their acyloxy derivs.
In a set of 22 hydrolases screened, including native as well as com.
enzymes, only *Aspergillus niger* (Lipase AS, AMANO) could catalyze the
hydrolysis with high enantioselectivity ($E = 176$). The resolved
halohydrins easily underwent transformation to (2S,3R)- and (2R,3S)-
phenylglycidates.

IT 145987-12-8P 757232-70-5P 757232-72-7P

757232-74-9P 800368-87-0P 800368-88-1P

800368-89-2P 800368-90-5P

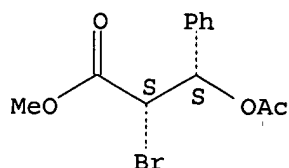
RL: PUR (Purification or recovery); RCT (Reactant); PREP (Preparation);
RACT (Reactant or reagent)

(chemoenzymic approach to optically active **phenylglycidates**
via resolution of bromo- and iodohydrins)

RN 145987-12-8 CAPLUS

CN Benzenepropanoic acid, β -(acetyloxy)- α -bromo-, methyl ester,
(α S, β S)- (9CI) (CA INDEX NAME)

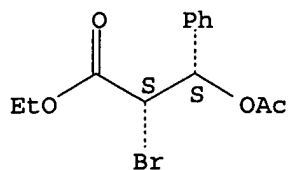
Absolute stereochemistry. Rotation (+).



RN 757232-70-5 CAPLUS

CN Benzenepropanoic acid, β -(acetyloxy)- α -bromo-, ethyl ester,
(α S, β S)- (9CI) (CA INDEX NAME)

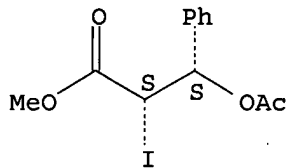
Absolute stereochemistry. Rotation (+).



RN 757232-72-7 CAPLUS

CN Benzenepropanoic acid, β -(acetyloxy)- α -iodo-, methyl ester,
(α S, β S)- (9CI) (CA INDEX NAME)

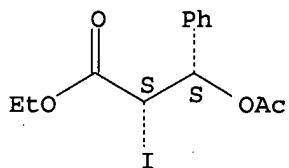
Absolute stereochemistry. Rotation (+).



RN 757232-74-9 CAPLUS

CN Benzenepropanoic acid, β -(acetyloxy)- α -iodo-, ethyl ester,
(α S, β S)- (9CI) (CA INDEX NAME)

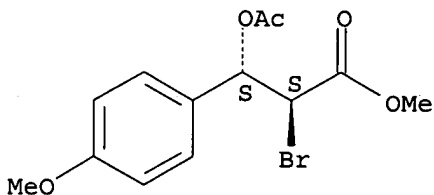
Absolute stereochemistry. Rotation (+).



RN 800368-87-0 CAPLUS

CN Benzenepropanoic acid, β -(acetyloxy)- α -bromo-4-methoxy-, methyl
ester, (α S, β S)- (9CI) (CA INDEX NAME)

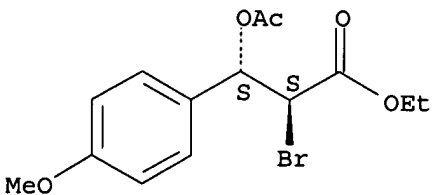
Absolute stereochemistry. Rotation (+).



RN 800368-88-1 CAPLUS

CN Benzenepropanoic acid, β -(acetyloxy)- α -bromo-4-methoxy-, ethyl
ester, (α S, β S)- (9CI) (CA INDEX NAME)

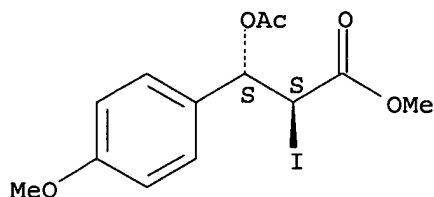
Absolute stereochemistry. Rotation (+).



RN 800368-89-2 CAPLUS

CN Benzenepropanoic acid, β -(acetyloxy)- α -iodo-4-methoxy-, methyl ester, (α S, β S)- (9CI) (CA INDEX NAME)

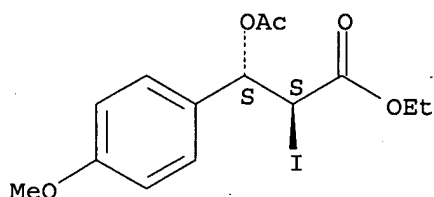
Absolute stereochemistry. Rotation (+).



RN 800368-90-5 CAPLUS

CN Benzenepropanoic acid, β -(acetyloxy)- α -iodo-4-methoxy-, ethyl ester, (α S, β S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 59339-53-6P 59339-56-9P 66168-33-0P

800368-79-0P 800368-80-3P 800368-81-4P

800368-82-5P 800368-83-6P

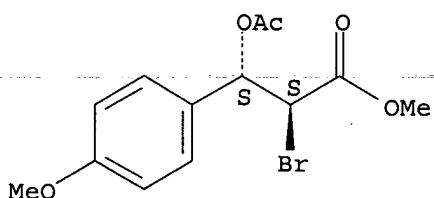
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(chemoenzymic approach to optically active **phenylglycidates** via resolution of bromo- and iodohydrins)

RN 59339-53-6 CAPLUS

CN Benzenepropanoic acid, β -(acetyloxy)- α -bromo-4-methoxy-, methyl ester, (R^* , R^*)- (9CI) (CA INDEX NAME)

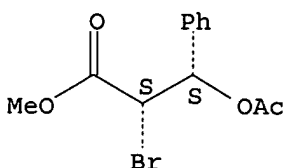
Relative stereochemistry.



RN 59339-56-9 CAPLUS

CN Benzenepropanoic acid, β -(acetyloxy)- α -bromo-, methyl ester, (R^* , R^*)- (9CI) (CA INDEX NAME)

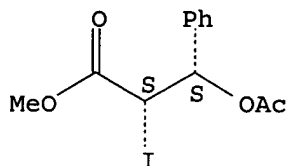
Relative stereochemistry.



RN 66168-33-0 CAPLUS

CN Benzenepropanoic acid, β -(acetyloxy)- α -iodo-, methyl ester,
(R*,R*)- (9CI) (CA INDEX NAME)

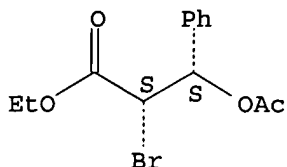
Relative stereochemistry.



RN 800368-79-0 CAPLUS

CN Benzenepropanoic acid, β -(acetyloxy)- α -bromo-, ethyl ester,
(α R, β R)-rel- (9CI) (CA INDEX NAME)

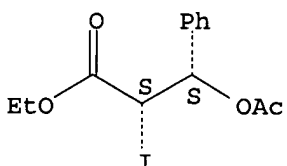
Relative stereochemistry.



RN 800368-80-3 CAPLUS

CN Benzenepropanoic acid, β -(acetyloxy)- α -iodo-, ethyl ester,
(α R, β R)-rel- (9CI) (CA INDEX NAME)

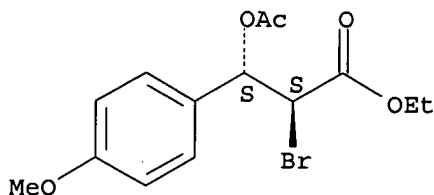
Relative stereochemistry.



RN 800368-81-4 CAPLUS

CN Benzenepropanoic acid, β -(acetyloxy)- α -bromo-4-methoxy-, ethyl
ester, (α R, β R)-rel- (9CI) (CA INDEX NAME)

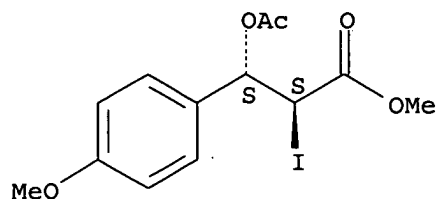
Relative stereochemistry.



RN 800368-82-5 CAPLUS

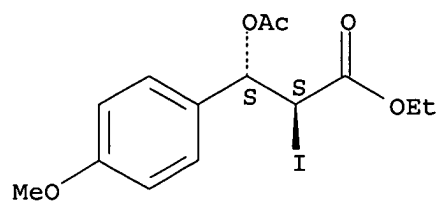
CN Benzenepropanoic acid, β -(acetyloxy)- α -iodo-4-methoxy-, methyl
ester, (α R, β R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 800368-83-6 CAPLUS
 CN Benzenepropanoic acid, β -(acetyloxy)- α -iodo-4-methoxy-, ethyl
 ester, (α R, β R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



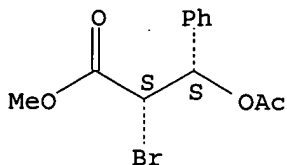
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:780853 CAPLUS
 DOCUMENT NUMBER: 141:276373
 TITLE: Stereoselective chemoenzymatic process for preparing optically enriched **phenylglycidates**
 INVENTOR(S): Anand, Naveen; Kapoor, Munish; Taneja, Subhash Chandra; Koul, Surrinder; Sharma, Ratan Lal; Qazi, Gulam Nabi
 PATENT ASSIGNEE(S): Council of Scientific and Industrial Research, India
 SOURCE: PCT Int. Appl., 21 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

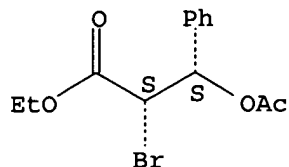
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004081219	A1	20040923	WO 2004-IB670	20040310
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US 2004259943	A1	20041223	US 2004-798199	20040310
PRIORITY APPLN. INFO.:			IN 2003-DE275	A 20030312
OTHER SOURCE(S): CASREACT 141:276373; MARPAT 141:276373				
AB The present invention relates to a novel and efficient chemoenzymic process of preparation of optically active trans alkyl phenylglycidates . The invention particularly discloses a novel process for the chemoenzymic synthesis of two enantiomers of trans alkyl phenylglycidate i.e. alkyl(2S,3R)- phenylglycidate and alkyl(2R,3S)- phenylglycidate .				
IT 145987-12-8P 757232-70-5P 757232-72-7P 757232-74-9P RL: BCP (Biochemical process); BYP (Byproduct); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation); PROC (Process) (stereoselective chemoenzymic process for preparing optically enriched phenylglycidates)				
RN 145987-12-8 CAPLUS				
CN Benzenepropanoic acid, β -(acetyloxy)- α -bromo-, methyl ester, (α S, β S) - (9CI) (CA INDEX NAME)				

Absolute stereochemistry. Rotation (+).



RN 757232-70-5 CAPLUS
 CN Benzenepropanoic acid, β -(acetyloxy)- α -bromo-, ethyl ester, (α S, β S) - (9CI) (CA INDEX NAME)

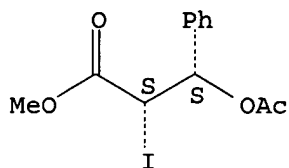
Absolute stereochemistry. Rotation (+).



RN 757232-72-7 CAPLUS

CN Benzenepropanoic acid, β -(acetyloxy)- α -iodo-, methyl ester, (α S, β S) - (9CI) (CA INDEX NAME)

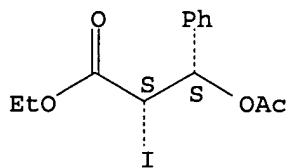
Absolute stereochemistry. Rotation (+).



RN 757232-74-9 CAPLUS

CN Benzenepropanoic acid, β -(acetyloxy)- α -iodo-, ethyl ester, (α S, β S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 52742-04-8P 61682-25-5P 62317-42-4P

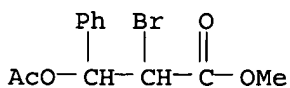
757232-68-1P

RL: BCP (Biochemical process); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)

(stereoselective chemoenzymic process for preparing optically enriched phenylglycidates)

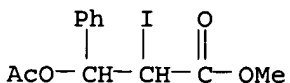
RN 52742-04-8 CAPLUS

CN Benzenepropanoic acid, β -(acetyloxy)- α -bromo-, methyl ester (9CI) (CA INDEX NAME)

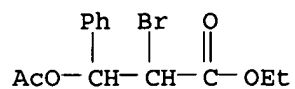


RN 61682-25-5 CAPLUS

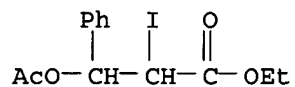
CN Benzenepropanoic acid, β -(acetyloxy)- α -iodo-, methyl ester (9CI) (CA INDEX NAME)



RN 62317-42-4 CAPLUS
CN Benzenepropanoic acid, β -(acetyloxy)- α -bromo-, ethyl ester
(9CI) (CA INDEX NAME)



RN 757232-68-1 CAPLUS
CN Benzenepropanoic acid, β -(acetyloxy)- α -iodo-, ethyl ester (9CI)
(CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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